

Minutes  
Radiation Advisory Board Meeting  
November 2, 2005  
Virginia Department of Environmental Quality  
Piedmont Regional Office  
4949-A Cox Road  
Glen Allen, VA 23060

**Members Present:** Lee S. Anthony, Sr., Ph.D., Edway R. Johnson, Joyce O. Hawkins, Panos P. Fatouros, Ph.D., and Drexel Nelson Harris

**Members Absent:** Mary Ann Turner, M.D., Andrew C. Boone, Jr., Ted Sherwin, D.D.S., Robert Toal, D.V.M., and James R. Thornton

**Ex Officio Members Present:** Carl Armstrong, M.D., representing the State Health Commissioner, John Beers representing the Department of Agriculture and Consumer Services; Gary Shirley representing the Virginia Department of Emergency Management (VDEM); Karen Sismour representing the Department of Environmental Quality (DEQ); Ronald Graham representing the Department of Labor and Industry and Tom Grose representing Virginia Institute of Marine Science.

**Staff Present:** Khizar Wasti, Ph.D., Director, Health Hazards Control; Leslie P. Foldesi, Director, Radiological Health Program; James deKrafft, Supervisor, Radioactive Materials Program; Stan Orchel, Jr., Supervisor, X-ray Machine Program, Marie S. Harris recording secretary and Debbie Roddenberry, Business Manager, Office of Epidemiology

**Guests Present:** Terry Eastman R.T., FASRT, Technical Director, Radiographic Techniques, Roanoke, VA; and Bob Wickline, Virginia Department of Environmental Quality (DEQ)

**Call to Order**

Dr. Carl Armstrong called the meeting to order at 10:05 a.m. All attendees present were acknowledged with a brief introduction. Joyce O. Hawkins was introduced as the newest member effective October 18, 2005.

Dr. Armstrong requested Dr. Anthony to give an overview of the Advisory Board's past and current activities as an update for Ms. Hawkins.

Dr. Armstrong asked if there were any additional items to be included on the agenda as presented; none was added. The meeting moved to the motion for approval of the Minutes for the July 20<sup>th</sup> and September 6<sup>th</sup> meetings. The motion made by Dr. Anthony and seconded by Edway Johnson was carried.

**Activities regarding the NRC Agreement State Program**

**Responses from licensees - Khizar Wasti, Ph.D.**

In October 2005, 400 letters and information packages were sent to hospitals, medical centers, schools and research facilities. Of the 400 letters sent, there were responses from 11 licensees with the following opinions:

*1 Opposed, initially, but took neutral position upon clarification*

*3 Neutral, exempt from NRC fees -Virginia State University, Virginia Military Institute, and Virginia Institute of Marine Sciences*

*3 Had questions, but still offered no opinion of support or non-support*

*4 In Support*

Dr. Wasti also reported that the Newport News Shipyard submitted no opinion of opposition or support. In summary, it appears that moving forward with charging the licensees a surcharge for Virginia to reach NRC Agreement State status will not have a negative effect on the licensees.

**State surcharge statutory authority - Khizar Wasti, Ph.D.**

Dr. Wasti reported that the Attorney General's Office was reviewing the proposal to determine whether a fee schedule can be promulgated, or if a legislative initiative is required to obtain statutory authority for the surcharge. A fee schedule will need to be established when approved by the Attorney General's Office, along with a letter of intent to the Governor's Office.

Dr. Armstrong commented that we might need a sponsor for a legislative initiative for the surcharge, depending on the Attorney General's response and advised the Advisory Board that we may want to think of suggestions for sponsors. Dr. Anthony acknowledged Dr. Armstrong's comments and responded that we would be able to get sponsors.

Les Foldesi stated that we currently have authority to collect fees from our current radioactive materials licenses, but when we become an Agreement State, we can also collect from the new licensees.

Dr. Wasti asked the question about the collection of fees during the transition period before becoming an Agreement State. Les Foldesi stated that NRC would collect fees from their licensees until the Agreement State document is signed. VDH will need to collect the surcharge fees from them as well during the transition.

**Impact of the 2005 Federal Energy Bill - Les Foldesi**

The discussion was focused on NRC regulatory authority of byproduct materials, source materials, and special materials, and state authority for naturally occurring materials and accelerator produced materials. This Energy Act was signed into law on August 8, 2005 and requires NRC to issue regulations within 18 months (February 8, 2007). The recent Energy Policy redefines radioactive materials in the Atomic Energy Act to include state regulated radioactive materials. This could have a significant impact on VDH's radioactive materials program with regulatory authority going to the NRC. NRC issued a time-limited waiver on August 31, 2005 to allow for the continued use of radioactive materials in radiopharmaceuticals for treatment of patients and allows time for states that have no agreement with the NRC to continue their existing program while pursuing the agreement. The waiver is effective for import and export of materials until August 7, 2006 or sooner and for other materials until August 7, 2009 or sooner.

NRC will issue a transition plan along with the regulations. Agreement States and those states with Letters of Intent on file at the time regulations/transition plan are promulgated will include these materials in the agreement, otherwise regulatory authority will be transferred to the NRC.

Without the Letter of Intent on file by February 7, 2007 or sooner, VDH radioactive materials program activities will transfer to NRC when the NRC regulations are published. The radioactive materials program at VDH may be subject to a reduction in staff with expertise for participation in the FEMA evaluated nuclear power plant exercises. Once this activity is transferred to NRC,

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future efforts to become a NRC Agreement State will be more difficult without existing expertise in radioactive materials.

**Dr. Armstrong adjourned the meeting for a short morning break.**

**Next Steps** – Carl Armstrong, M.D.

The discussion opened with review of the last meeting regarding the status of the Letter of Intent. The State Health Commissioner was advised of the Letter of Intent and time frame to send the Letter of Intent to the Governor's Office.

Each member had a draft copy of the Letter of Intent and attached Decision Brief. Dr Armstrong reviewed each of the documents with the Board and requested that members submit their suggestions and comments.

### **Comments:**

Dr. Anthony commented to add in the Background Section that the General Assembly has been aware of our proposal to become an agreement state and approved of our efforts referencing House Bill 2655 (Patron: Delegate J. Katzen).

Dr. Fatouros commented to mention the impact of the 2005 Federal Energy Bill on VDH's radioactive materials activities.

Edway Johnson questioned the last paragraph of the letter in reference to the contact information.

Additional comments were made as a group effort from the Board regarding Option #4 under Options/Recommendation change *status quo* statement, since the Energy Bill eliminates the *status quo* position.

Dr. Armstrong requested to have changes made within the next 2 days. He stated that the format of the Letter of Intent and Briefing Decision document has been reviewed and approved by the State Health Commissioner, Dr. Robert Stroube. Dr. Armstrong asked Board members to submit their comments and/or suggestions by email to him (Dr. Armstrong) and Dr. Wasti by close of business on Friday, November 4, 2005. This concluded the discussion of topics for activities regarding the NRC Agreement State Program.

### **Status of Radiation Protection Regulations - Les Foldesi**

The proposed Radiation Protection Regulations have been posted on the Town Hall Website for public comment. The public comment period ended September 29, 2005. Ten individuals submitted comments. The comments submitted were in reference to Private Inspector qualifications, X-ray machine operator qualifications, operator technique charts (*exposure limits*), definition of survey versus inspection, inconsistencies with FDA's mammography regulations, X-ray machine inspection fees, recent NRC regulatory revisions, missing appendices incorporated into text, and a few technical machine issues.

The staff will prepare responses with modifications to the proposed regulations to the Board of Health for approval at the next meeting in February 2006. After the Board of Health approves the regulations, the regulations become final 30 days after publication in the *Virginia Register*.

### **Old Business**

None

### **New Business**

Dr. Anthony commented on the current fee schedule for X-ray inspections. Currently all fees go to the State General Fund. Dr. Anthony asked if the fees could be recovered from the State General Fund. He was informed that it would require a change in the State Code. The VDH Adjudication Officer has advised staff to delay submission of the proposed fee schedule until the Radiation Protection Regulations were back on track.

There was also discussion of funding for additional training and new equipment for the X-ray Program. Les Foldesi commented that FDA has cut support for advanced training and that the X-ray staff is limited to the required FDA courses for mammography. Cost for advanced training can reach \$10,000.00 per employee.

Dr. Fatouros commented that the public expects our staff to be well trained and that funding for additional training is necessary.

Dr. Anthony made a comment that a good program needs good professional training.

Dr. Armstrong suggested that we may need to respond to the Office of Epidemiology Business Manager, Debbie Roddenberry, for getting grants or funds for the training of the X-ray staff.

### **Public Comments**

The following written statement of support of the Advisory Board was submitted and read by Terry Eastman, R.T., FASRT, Technical Director, Radiographic Techniques, Roanoke, VA. Mr. Eastman is an advocate for use of technique charts by X-ray machine operators to ensure the reinforcement of the concept of *ALARA* (*Apply Low as Reasonably Achievable*) radiation exposure to patients.

*“On May 21<sup>st</sup>, Lee (Anthony) and I in conjunction with a radiologist were guests in WVTF the local NPR station for the Evening Edition broadcast. The pending revised X-ray regulations were the topic of discussion.*

*The broadcast went well and supportive comments were made regarding the draft of the regulations. One caller was both amazed and pleased that the use of X-rays in medicine were even being aired*

*As you know my interest in these regulations centers on 12 VAC 5-481-1590.*

*I resided in Texas when their regulations were implemented requiring the use of exposure guides. The director of the Bureau of Radiation Control was a colleague of mine dating back to our service in the U.S. Army Medical Corps. The inspectors soon got on to the fact that registrants were posting commercial computerized technique charts for “show only”.*

*The survey format was changed to request that the user set up a technique for a routine radiographic study. Frequently, there was no correlation between the set technique and that listed on the exposure guide. Another inspection protocol was to ask the user to set a technique for an AP abdomen (21 cm), PA chest (21 cm), lateral lumbar spine (30 cm), and lateral skull (15 cm). An exposure was then made and the results in mR equivalent read with a test device. Here again, results often did not match the technique chart, and the mR readings were higher than obtained with optimal technique.*

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*A recent talk at a seminar led to a private clinic requesting help with technique in order to be in compliance with 12 VAC 5-481-1590. I applaud their taking aggressive action to be in compliance. Unfortunately, I suspect many registrants will not take action until your office issues a citation.*

*On going work confirms that when the Radiation Health Program implements the revised regulations, inspectors will find many registrants not in compliance. The introduction of Computer Radiography (CR) finds that some are using the database of the program to salvage exposures in lieu of accurate techniques. This presents a whole new set of problems.*

*At the aforementioned clinic, I was able to show the registrant that increasing kVp for abdomen studies from 70 kVp to 80 kVp reduced the entrance dose by some 30%.*

*No doubt, there is an educational effort needed to help users to optimize results”.*

### **Next Meeting**

Dr. Armstrong suggested that the next Advisory Board meeting be held after the General Assembly recesses, but VDH will continue forward with the Agreement State status. It was agreed to meet again sometime in May 2006, at the same location of the Va. Department of Environmental Quality's Regional Piedmont Regional Office in Glen Allen, Va.

### **Adjournment**

The meeting was adjourned at 12:30 pm, with lunch following the adjournment.